

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated August 7, 2007. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1-20 are under consideration in this application. Claims 5, 8, 18 and 20 are being amended, as set forth above and in the attached marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicants' invention.

All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Claims 1-10 were objected to for informalities, and claims 1-10 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. As indicated, the claims are being amended as required by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejections

Claims 1-10 were rejected under 35 U.S.C. §102(a) as being anticipated by Srikanth et al. (US 6,556,547). Applicants have reviewed the above rejection, and hereby respectfully traverse.

The redundancy packet transmission system of the present invention (for example, Embodiment 1 depicted in Fig. 6; p. 10), as now recited in claim 1, comprising an active router 11 and a standby router 12 each of which includes a function to realize a plurality of virtual routers VR1, VR2 therein, and an internal wiring conductor to connect said active router 11 and said standby router 12.

Each of said active router 11 and said standby router 12 (e.g., Fig. 7) includes: a network interface 56 accommodating communication channels; a processor 63 for making a predetermined process on a received packet; a table memory 61 for storing routing information necessary for the routing processing of said received packet; and a program

memory 62 in which a program to be executed by said processor 62 is previously stored, whereby when synchronizing said routing information managed by two or more VR1, VR2 of said plurality of virtual routers realized and activated on said active router 11 with said routing information managed by corresponding two or more VR1, VR2 (*“The redundancy packet transmission router of this embodiment shown in FIG. 6 includes two packet transmission routers, but it is possible to construct a large-scale redundancy packet transmission router that includes three or more packet transmission routers.”* P. 14, lines 10-14) of the virtual routers realized but not yet activated on said standby router 12, said processor 63 provided on said active router 11 transmits to said standby router a packet (Fig. 9) including identification information of one of said two or more virtual routers realized and activated on said active router 11 (i.e., VR configuration flag and the virtual router identifier), receives a response signal relative to said identification information from said corresponding virtual routers realized but not yet activated on said standby router 12, and transmits to said standby router 12 said routing information managed by said one of the (two or more) virtual routers realized and activated on said active router 11.

FIG. 9 shows the format of the VRRP packet according to the present invention. This format is different from the conventional format shown in FIG. 2 in that (1) a VR configuration flag indicating whether to activate said corresponding virtual routers on said standby router (in the conventional type field), as recited in claim 2, and (2) a VR identifier to distinguish between virtual routers VR1, VR2 realized on the same active router (in the conventional VRID field which identifying virtual routers realized on different physical routers) (p. 14, last paragraph).

In the prior art, the data of the routing table that the VR 1 manages and data of the routing table that the VR 2 manages are not distinguished when they are transferred from the active router 11 to the standby router 12. As a result, the classified information of each ISP is lost (p. 7, 1st line). The invention is design to solve the prior art problem of mixing the routing information managed by the virtual routers VR1, VR2 which are realized on the same active router (p. 6, 2nd paragraph).

In addition, the standby router independently manages each routing table so that the confidentiality of each VR is assured. Therefore, even if the destination of data from the user is changed from the active router 11 to the standby router 12, the data in VR1 is not leaked into VR2, when being transferred to the standby router (p. 19, last paragraph).

Applicants respectfully contend that Srikanth fails to teach or suggest that “the processor 63 provided on said active router 11 transmits to said standby router 12 a packet

including identification information of one of said two or more virtual routers VR1, VR2 realized and activated on said active router 11, when synchronizing said routing information among the active and standby virtual routers” according to the present invention.

In contrast, Srikanth only configure TWO virtual router 1, 2 in network 100 (col. 2, lines 8-9). The virtual router 1 includes a master/activated virtual router realized on the router 105 and a backup/not-activated virtual router realized on the router 110 (col. 2, lines 12-14), while the virtual router 2 includes a master/activated virtual router realized on the router 110 and a backup/not-activated virtual router realized on the router 105. In other words, Srikanth simply does not utilize the routers as one active and the other one standby. Rather, both routers 105 and 110 are semi-active, and semi-standby.

In addition, neither the router 105 nor the router 110 have two or more virtual routers VR1, VR2 realized and activated therein, when synchronizing said routing information among the master and backup virtual routers. Since Srikanth does not support two or more virtual routers VR1, VR2 realized and activated on the same physical router, it does not “transmit to said standby router 12 a packet including identification information of said two or more virtual routers VR1, VR2 realized and activated on said active router 11, when synchronizing said routing information among the active and standby virtual routers” according to the present invention.

In Srikanth, since each physical router has one active virtual router and one standby virtual router mounted thereon, the active virtual router can be specified by using the identification information of the physical router. On the other hand, the present invention has each physical router mounted with a plurality of active virtual routers and a plurality of standby virtual routers mounted thereon, a particular active virtual router can not be specified by using just the identification information of the physical router shared by many virtual routers, but by using the identification information of the active virtual router.

Applicants contend that Srikanth fails to teach or suggest each and every feature of the present invention as recited in independent claim 1. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

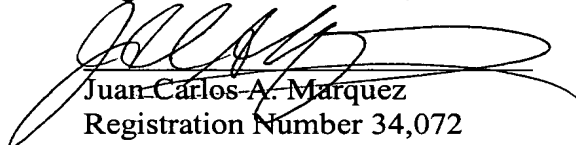
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

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